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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,321	12/03/2001	Thomas Honger Callisen	10096.200-US	9485
25908	7590	11/01/2004	EXAMINER	
NOVOZYMES NORTH AMERICA, INC. 500 FIFTH AVENUE SUITE 1600 NEW YORK, NY 10110			KISHORE, GOLLAMUDI S	
			ART UNIT	PAPER NUMBER
			1615	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/005,321	CALLISEN, THOMAS HONGER	
	Examiner	Art Unit	
	Gollamudi S Kishore, Ph.D	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6-30-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The RCE dated 6-30-04 is acknowledged.

Claims included in the prosecution are 1-23.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al (5,954,998) in view of Disher (Science, 1999) or vice versa; that is, Disher in view of Zhou.

Zhou et al disclose detergent vesicular preparations prepared from diblock copolymers of propylene oxide and ethylene oxide (Pluronic). The vesicular preparations further contain surfactants and enzymes (abstract, col. 12, line 7-55; col. 16, lines 25-30 and Examples). Zhou et al do not specifically teach that the vesicles are made entirely from Pluronic and their examples indicate the use of vesicles prepared from novasomes, which contain only 20 % non-ionic surfactant and the rest lipids.

Disher teaches that amphiphilic diblock polymers (polyethylene oxide-polyethylethylene) like phospholipids when dispersed in water self-assemble into lamellar structures (vesicles) and the vesicles thus formed are tough vesicles and are useful for encapsulation (abstract and page 1145).

It would have been obvious to one of ordinary skill in the art to use vesicles made entirely from Pluronic which is an amphiphilic diblock polymer in the detergent compositions of Zhou et al since Disher teaches that such vesicles are tough; it would Alternately, to use Disher's vesicles made entirely from diblock polymers in the detergent vesicular compositions of Zhou et al would have been obvious to one of ordinary skill in the art since Zhou et al show that such compositions can be used to encapsulate enzymes in laundry preparations.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al (5,954,998) in view of Disher (Science, 1999) or vice versa; that is, Disher in view of Zhou as set forth above, further in view of WO 97/24177 of record.

The teachings of Zhou et al and Disher have been discussed above.

WO 97 teaches liquid detergent compositions containing non-ionic block copolymers such as ethylene oxide-propylene oxide and encapsulating enzymes. The amount of this polymer is between 1-50 %. (abstract, page 19, lines 13-32, pages 44-48). One of ordinary skill in the art would be motivated further to use the tough vesicular preparations made from the diblock polymers since WO 97, which also shows the use of these polymers in the same laundry detergent compositions, but not in vesicular form.

The reference of Harada, which teaches encapsulation of enzymes in diblock polymers, is cited of interest.

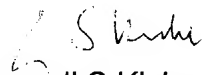
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gollamudi S Kishore, Ph.D whose telephone number is

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(571) 272-0598. The examiner can normally be reached on 6:30 AM- 4 PM, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gollamudi S Kishore, Ph.D
Primary Examiner
Art Unit 1615

GSK